

REMARKS

Claims 1-19 remain in the application including independent claims 1, 11 and 16. Claims 1-19 stand rejected under 35 U.S.C. 112, first paragraph. The examiner argues that it appears that “spring element 34 is intended to deflect upwards in response to an upwardly directed overload force; this would mean that the beam member 34 deflects in a direction that is the same as the direction of normal force application, not the opposite as stated in the claims.” Applicant disagrees with the examiner’s characterization of claim 1.

As discussed at paragraph [19] of the subject application, a weight force F_w is exerted against the seat bottom 18. This weight force F_w represents a standard or normal weight force F_w that is exerted against a seat bottom 18 by the passenger 20 sitting on the seat 12. The downward direction of this weight force F_w is clearly shown in Figure 1.

As discussed at paragraph [29] of the subject application, when an overload force F is exerted upwardly on the track assembly 26, the beam member 34 deflects upwardly. The upward direction of the overload weight force F is clearly shown in Figures 2 and 3. The upward overload force F is clearly exerted in a direction that is different than or opposite from the downward weight force. Thus, beam member 34 does not deflect in a direction that is the same as the direction of normal or standard weight force application as argued by the examiner.

Applicant has amended claim 1 to clarify the sensor assembly measures strain resulting from a weight force being applied to the seat bottom and that the beam member is deflectable in response to an overload force applied to the seat track assembly in a direction opposite to the direction of the weight force application. Independent claim 16 has similarly been amended. Independent claim 11 in its original form already made this feature clear. Thus, Applicant

asserts that the examiner's rejection to claims 1-19 under 35 U.S.C. 112, first paragraph, as set forth in Item 2 of the subject official action has now been overcome.

Claims 1-19 stand rejected under 35 U.S.C. 112, first paragraph, because the examiner is confused as to the operation of the "resilient beam member" as set forth in the claims. First, the examiner argues that it is unclear how beam member acts as a spring, stating that "element 34 is nothing more than a shim."

As discussed at paragraph [22] of the subject application, in order to "provide overload protection, a resilient beam member 34 is installed between each of the sensor assemblies 32 and the base member 24." Overload protection is required to prevent seat separation during high-speed collisions. In such a collision, the weight of a seat occupant 20 secured to the seat with a seatbelt exerts an upward or overload force F on the seat assembly 12. This upward force F can cause the seat 12 to separate from the vehicle floor 24. Overload protection is designed into the seat structural components to prevent this from happening.

Further, as explained at paragraph [25] of the subject application, the beam member 34 is described as a spring element having a first spring end attached to the base member 24 and a second spring end 56 attached to the plate 44 that is part of the sensor assembly 32. As set forth at paragraph [29], when an overload force F is exerted on the track assembly 26, the beam member 34 deflects upwardly more than the bendable center portion of the sensor plate 44 to prevent the track assembly 26 from separating from the base member 24 and to prevent permanent deformation to the sensor plate (see Figure 3). When the overload force F is no longer being exerted against the track assembly 26, the beam member 34 returns to its normal or

rest position (see Figure 2). Thus, the function of this resilient beam member satisfies the requirement of a spring element.

The examiner further argues that there is no mention of “what ‘resilient’ material element 34 is comprised from, and there is nothing about its shape or method of mounting that would suggest that it bends, deflects, or has any ‘spring’ like properties at all (both the drawing and the written description agree that element 34 is mounted flat against base member 24 by bolts 62 at either end which seem to immobilize both ends of element 34 by pinning each end to base 24). Applicant strongly disagrees with this characterization of the claims.

First, element 34 is not bolted at both ends to the base member 24. Only one end of the beam member 34 is mounted to the base member 24. As clearly described at paragraph [25] of the subject application, the first spring end 54 of the beam member 34 is attached to the base member 24 and the second spring end 56 is attached to the plate member 44 of the sensor assembly 32. In other words, the second spring end 56 of the beam member 34 is not attached to the base member 24.

Second, the description and drawings clearly show that the beam member bends, deflects, and has “spring like” properties. As shown in Figure 2 and as described at paragraph [25], the beam member 34 rests against a bottom support surface 60 formed in the base member 24 during normal or standard weight force applications, i.e. when a passenger 20 is seated on the seat 12. As shown in Figure 3 and as described at paragraph [29], in response to the overload force F , the beam member 34 deflects or bends upwardly such that the second spring end 56 moves away from the bottom support surface 60 of the base member 34. The cooperation between the overload element 70 and the track surface 84, as the base member 34 moves, prevents the track

assembly 26 from separating from the base member 24. When the overload force F is no longer being exerted against the track assembly 26, the beam member 34 returns to its normal or rest position (Figure 2). Thus, the beam member clearly has “spring” like properties.

[18] The examiner further argues that even “if end 56 of element 56 is not pinned to the base member 24, since the cross hatching in the drawing is the same for element 34 as the cross hatching for element 44, one has to assume that the two elements are made from the same material” Applicant strongly disagrees with the examiner’s assumption. Applicant respectfully requests that the examiner indicate where in the MPEP support is found for this assertion.

[19] There is nothing in the subject application that states that plate 44 and the beam member 34 have to be made from the same material. Further, as explained at paragraph [33], the “subject weight sensor assembly 32 used in combination with the beam member 34 provides a secondary spring element in series with the sensor assembly 32 that provides increased deflection to work in conjunction with larger overload stop gap sizes. The secondary spring element has less stiffness than the plate member 44 of the sensor assembly 32. The allowable deflection of the spring element causes the system to hit the overload stop well before the yield points of both the plate 44 and the beam member 34.”

[20] Further, Applicant is not required to indicate what type of resilient material is used to form the beam member. Any type of resilient material known in the art could be used to form the beam member.

No amendments to the claims or written description are required. Thus, Applicant asserts that the examiner's rejection to claims 1-19 under 35 U.S.C. 112, first paragraph, as set forth in Item 3 of the subject official action is improper and must be withdrawn.

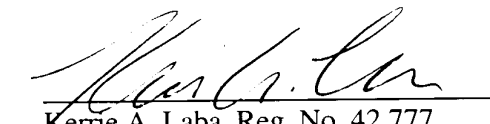
Claims 1-19 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite. Specifically, the examiner seems to be objecting to the use of the term "normal," however, the argument presented is not clear because the claim language specifically identified by the examiner does not include the term "normal." The examiner argues that "normal" in a geometric sense means 90 degrees, i.e. a right angle. There is nothing in the subject application that limits the term "normal" to a 90 degree interpretation as argued by the examiner. The examiner has absolutely no basis for this assumption. However, in order to eliminate this issue, claims 1-19 have been amended to simply remove the term "normal." Thus, Applicant asserts that the rejections to claims 1-19 based on 35 U.S.C. 112, second paragraph, have now been overcome.

The subject specification includes a written description of the invention that is full, clear, and concise so as to enable any person skilled in the art to make and use the invention. If the examiner continues to uphold these 35 U.S.C. 112 rejections, Applicant respectfully requests a telephone interview with the examiner so that the examiner's rejections can be more clearly understood by Applicant.

2000P09042US01; 60,426-290

Applicant believes that no additional fees are due, however, the Commissioner is authorized to charge Deposit Account No. 50-1482 in the name of Carlson, Gaskey & Olds for any additional fees or credit the account for any overpayment.

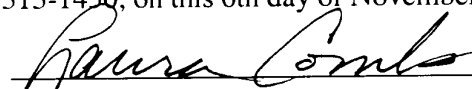
Respectfully submitted,


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CERTIFICATE OF MAIL

I hereby certify that the enclosed Response is being deposited with the United States Postal Service as First Class Mail, postage prepaid, in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 6th day of November, 2003.


Laura Combs

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